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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,900	06/23/2003	Thomas J. Qi	15559-2	7546

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EXAMINER

ALPERT, JAMES M

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/601,900	Applicant(s) QI ET AL.	
	Examiner James Alpert	Art Unit 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6 and 12-18 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1,2,4,6 and 12-18 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>23 June 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following communication is in response to Applicant's amendment filed on 29 April 2005.

Status of Claims

Claims 1-2,4 & 6 are currently amended, while Claims 3,5 & 7-11 are cancelled. Claims 12-18 are new, so Claims 1-2,4,6 & 12-18 are, therefore, currently pending.

Status of Disclosure

The amendments to the specification submitted on 29 April 2005 are intended to correct minor informalities, and are placed into the record.

Response to Arguments

Applicant's arguments filed 29 April 2005 have been fully considered. With regard to the 35 U.S.C §101 rejections discussing failure of Applicant to recite technology, Applicant's amendments do not fully overcome the previous rejection, and as discussed below, they are maintained. With regard to the 35 U.S.C §101 and §112 rejections, discussing useful results and conditional language, respectively, Applicant's amendments to the claims appear to have overcome the rejections, and they are hereby withdrawn. With regard to the 35 U.S.C §103 rejections, Applicant's amendments to the independent claims require that the examiner overcome more specific limitations than originally presented. Thus the §103 rejections mailed 27 January 2005 are hereby withdrawn, and new grounds for rejection are submitted below. Applicant's request for allowance is respectfully declined.

Claim Rejections - 35 USC § 101

Although applicant's amendment to Claim 1 does recite technology in the body of the claim, the amendment does not include a recitation of technology in the preamble of the claim. As was stated in the previous office action, **Claims 1-2,4,6 & 12** are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter. Specifically the method claims as presented do not claim a technological basis in the pre-amble of the claim. Without a technological basis, the claims may be interpreted, in an alternative, as involving no more than a manipulation of an abstract idea, and are therefore non-statutory under 35 U.S.C. 101. Claims 1 and 12, and the dependent claims therefrom, are directed toward a method of evaluating a portfolio of leased depreciable items. To overcome the deficiency described above, claim language should be considered such that both the preamble and body of the claim indicate that they are grounded within a technological art.

New Grounds of Rejections - 35 USC § 103

The text of section(s) 35 U.S.C § 103 can be found in a previous Office Action. **Claims 1-2,4,6 & 12-18** are rejected under 35 USC 103(a) as being unpatentable over Eichorst et al, U.S. Patent #6502080, in view of Munoz et al, U.S. Patent Application Publication #20020198819.

With regard to Claims 1 & 13, Eichorst teaches the method and system comprising:

providing data on leased items;
(Col. 3, line 25-44, Col. 4 lines 15-24)

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providing data on market forecasts;
(Col. 5, lines 43-45)

providing historical data on similar leased items;
(Col. 3, line 65 – Col. 4, line 5)

Eichorst teaches the method and system further comprising:

assigning a date of an occurrence to each of the leased items, and

assigning a dollar value respectively to each of the leased items on a corresponding date of occurrence, based at least upon the price forecast data and the historical data; as well as

estimating, with a data processing device, a residual value of the portfolio of leased items based at upon the assigned dates and dollar values;

These limitations can be analyzed together, and are found at (Figure 1, item 104; Figure 2, items 204-208; Figure 3, items 300-304). These figures depict the probabilities that a particular vehicle will be returned, that is, the probability that the current lessee will not purchase it. The examiner observes that if the probability of return is known, the probability of purchase is also known. These figures further depict assigning probabilities as to the timing of the sale of the vehicle if it is returned.

(Figure 3, item 302) further shows obtaining a probability value of whether the "lease vehicle will reach maturity." While this appears to be a reference to early termination, it is not expressly stated. Thus the examiner would point out that assigning a probability value to an early termination occurrence is taught by Munoz at (Page 4, Para. 40; Page 5, Para. 55). These passages make it clear that early termination is an important statistical value to consider when analyzing automobile leases. It would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to combining the teachings of Eichorst, relating to a statistical analysis of lease

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events, in order to determine reserve levels, with the teachings of Munoz, relating to providing a probability of early termination of an automobile lease. The motivation to combine the references is found in Munoz, at (Page 6-7, Para. 66) where it states,

"Early termination scenarios for a loan may include: repossession, early payoff, insurance loss, and early turn-in. Those skilled in the art will recognize that lenders utilize a number of loss models to estimate the probability of loss for each of these scenarios.

Lenders will try to use every statistical tool available to best evaluate their positions.

Figure 2, Steps 206-208, as well as additional steps in Figure 3 go on to determine a loss-dollar value for each lease based on probability statistics. When considering that Munoz combined with Eichorst accounts for pre-maturity as well as post-maturity losses, Applicant's primary argument then becomes that the instant application is distinguishable from Eichorst because a different statistical method is employed to calculate loss estimates. Yet applicant acknowledges that the random assignment of dates and dollar values tend "to cancel each other out when applied to a large portfolio" (Remarks, p. 15). The applicant, in assigning the dates and dollars randomly, is assigning probabilities of the various occurrences at various times. In that the claims must be given the broadest reasonable interpretation, see *In re Hyatt*, 211 F.3d 1367, 1372, (Fed. Cir. 2000), the Examiner maintains that assigning dates and dollar values is a probability assignment that is anticipated by Eichorst. To that end, Eichorst further comprises,

calculating a reserve level appropriate to the portfolio, based at least upon the estimated residual value; and (Figure 4, items 406,408)

providing the reserve level. (Figure 4, item 410)

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With regard to Claim 2, Eichorst does not teach the method wherein estimating step further comprises:

estimating the residual value by Monte-Carlo analysis.

However, the examiner takes Official Notice that utilizing a Monte-Carlo simulation comprising random numbers to determine events is an old and well-known technique in the art. As such, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to combine the teachings of Eichorst relating to predicting a net reserve for a vehicle portfolio to include a Monte-Carlo analysis of the uncertain occurrences involved in automobile leasing. The motivation for such a combination is to provide greater accuracy in results of an analysis by using multiple statistical techniques.

Further, MPEP § 2144.03(C) states, in respect to an Examiner's use of Official Notice:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b).

The same section continues:

If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate.

Applicant has not challenged or traversed the examiner's use of official notice in the previous office action, and repeated herein. This being the case, the examiner now considers as admitted prior art, the use of Monte Carlo analysis as described above.

With regard to Claim 4, Eichorst teaches the method wherein:

the occurrence for at least one of the leased items is a purchase of a corresponding leased item or a return of a corresponding leased item. (Figure 3, step 300)

With regard to Claim 6, Eichorst teaches the method comprising:

adjusting the dollar values to reflect a lessor's own experience at auctions a sale of previously leased items, wherein the residual value is estimated based at least upon the assigned dates and the adjusted dollar values. (Col. 6, line 61 – Col. 7, line 6)

With regard to Claims 12 & 16, the examiner has explained under claim 1 how the method and system in Eichorst estimates the occurrences of a return or a purchase by a lessee. Further, the Munoz references provide the additional component of estimating a lease that terminates early. These and the other limitations in this claim are rejected under similar analyses as in Claims 1,2,4 & 6.

With regard to Claims 14 and 17, Eichorst does not expressly teaches the system wherein:

the input interface, the output interface, and the data processing component are provided in a single computer.

However, this type of computing apparatus is old and well known in the art. As such the examiner takes Official Notice that such a device could implement the methods described in Eichorst. It would have been obvious to one of ordinary skill in the art at the time applicant's invention was made modify the teachings of Eichorst to include a single apparatus with input, output, and data processing components. The motivation for such a combination would be to reduce costs to a lessor by allowing the statistical analysis to be completed at one user station. This way, no additional professionals would be necessary to acquire the important data.

With regard to Claims 15 and 18, Eichorst does not expressly teaches the system wherein:

the output interface is a display device.

However, this type of computing apparatus is old and well known in the art. As such the examiner takes Official Notice that a display device could be used to demonstrate the results of the methods described in Eichorst. It would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to modify the teachings of Eichorst to include a display device (monitor) to demonstrate the results of the analysis. The motivation for such a combination would be to reduce costs to a lessor by allowing the statistical analysis to be viewed, rather than printed. Reduced paper costs are money saving to the user and beneficial to society.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

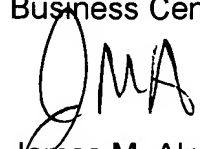
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Alpert whose telephone number is (571) 272-6738. The examiner can normally be reached on M-F 9:30-6:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (571) 272-6747. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.


James M. Alpert
July 18, 2005


HANI M. KAZIMI
PRIMARY EXAMINER